



Montgomery County Fire and Rescue Service

POST INCIDENT ANALYSIS

**2nd Alarm Town House Fire
19326 Elderberry Terrace
Germantown, MD**

Incident Date: March 23, 2013



**Submitted by
Captain Daniel Ogren**

Incident Overview:

Note: This post incident analysis (PIA) is based upon the review of the incident audio tape, interviews with crews who operated at the fire scene and the completion and review of PIA Unit Fact Sheets.

On March 23, 2013, at 1448 hours, Engine 734 was dispatched for a report of a small brush fire to the rear of a row of town homes. Prior to Engine 734 arriving on the scene Montgomery received additional calls reporting the fire now involved the rear of the townhouse. Immediately the call was upgraded to a Box Alarm and the balance of the assignment was dispatched.

Engine 734 arrived on the scene to find a 2-story, middle of the row townhouse with smoke showing from the rear of the building as well as black smoke from Side "A". Engine 734 established a water supply, advanced an attack line to Side "A" of the building, and established command. Engine 734 did not complete a 360 degree circle check, but Tower 734 did and passed that information onto Engine 734. An additional task force and RID were requested.

Tower 734 and Battalion Chief 705 arrived within minutes of Engine 734. Tower 734 completed a circle check of the structure and observed Side "C" of the building had heavy fire on all 3 floors of the Town House (Basement, 1st, and 2nd Floor) with apparent extension into the adjoining units. Battalion Chief 705 assumed command from Engine 734. Based on the initial reports, the rapid increase in smoke and fire visible from Side "A", and the significant wind gusts Command requested the balance of a 2nd Alarm be dispatched.

Fire spread quickly to all three floors of the involved Townhouse and began to impinge on the surrounding units. Companies made an aggressive attack on Side "C" of the structure quickly extinguishing the bulk of the fire in the Basement Division as well as the fire extending up the exterior of the structure. Fire involving and surrounding the electrical service to the home was held in check until Pepco arrived to cut the power. Once the power was controlled the remainder of the fire was extinguished. At the same time Engine 734 with the assistance of a number of other crews made entry to the structure on Side "A" and extinguished the fire on floor number 1, 2 and the Attic area.

While the bulk of the fire was being extinguished in the home of origin crews were quickly assigned to Exposure "B" and Exposure "D" where they entered the attic area's to check for and stop the advancement of any fire spread. Ultimately the Firewall of Exposure "B" was not breached and the fire did not extend to that unit. Exposure "D"s firewall was also not breached. Fire did however manage to extend around the firewall allowing a small amount of fire to spread to that attic.

INVESTIGATIONS:

An origin and cause investigation was conducted by MCFRS Fire and Explosive Investigations Fire Marshall 763 and Fire Marshall 754. The investigation revealed that the fire started in the area of the electrical service entrance. Heavy damage inside both the meter box and panel box was noted. However the possibility of the fire starting by improperly discarded smoking materials in a trash pile under the meter could not be eliminated. Thus the fire is listed as undetermined.

Damage: \$150,000.00 to the structure and \$50,000.00 to contents

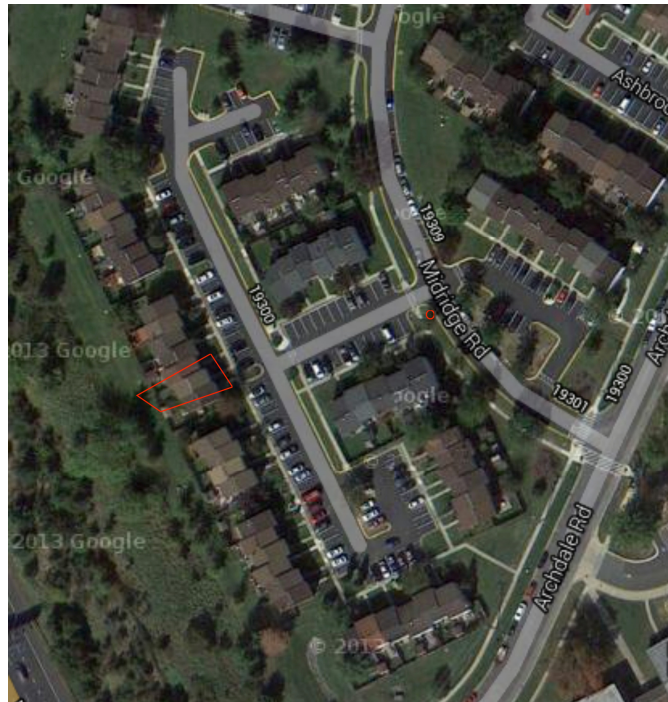
Injuries: none reported, however, 2 dogs owned by the renter perished in the fire.

S/D: occupant evacuated prior to smoke detectors alerting. Several ionization detectors present.

Cause: Undetermined

Structure/Site Layout:

- The structure at 19326 Elderberry Terrace is in an older Germantown Neighborhood comprised of similar townhomes. Access to the neighborhood is limited. Elderberry Terrace itself is a dead end road with no vehicle access to Side "C" of the structure.



The townhouse was located second from the end of the row, unit within the red square.



Engine 734 laid-out from this hydrant and took a position in front of the “D” exposure.

- The townhouse was approximately 1,600 square feet in size and was constructed in 1980. It was built of Type III construction with no fixed fire suppression systems.
- The layout of the house was typical 2 stories in the front, 3 stories in the rear with a walk out basement. The first floor was comprised of a kitchen, dining area, powder room, and living room. The second floor had a master bedroom and bathroom plus two additional bedrooms and a bathroom. The basement was finished with a rear (Side “C”) walk out.



SIDE “A” – 2 stories second from the end of the row townhouse



3 stories in the rear with a walk out basement. The walls that separated the “B” and “D” exposures were masonry block in the basement and triple hung drywall through the attic with no identified “poke-throughs”. The presence of masonry fire wall drastically decreased the lateral fire spread



Offset of homes also effected fire spread. Fire was prevented from spreading to Exposure “B” because unit was set back and fully protected by Fire Wall. Exposure “D” was exposed to fire, bypassing firewall due to that unit extending past the fire wall.



Damage to Kitchen – Side “A” Quadrent “A” - 1



View from Front of TH toward and out Side “C”



Stacked Stairs – Side “B” Quadrant A/B – View from 1st to 2nd Floor



Damage to Kitchen – Side “A” Quadrant “A” - 2

Communications:

- The incident was dispatched for a small fire to the rear of the townhome.
- Call Upgraded to Full Box Alarm while Engine 734 en-route.
- Numerous updates were provided verbally by the 7-Bravo and 7-Charlie dispatchers while units were still en-route to the incident.
- Numerous updates were also provided via MDC updates while units were still en-route to the call as well as during the incident.
- Incident was managed using Talk Group(s) 7-C & 7-D
- The 911-call takers did an outstanding job.
- During Incident there were no radio communications issues
- VRS was not needed or activated.

Pre-Emergency Planning:

- There were no pre-fire plans for the structure other than a complex map originally drawn by Station 29 personnel.
- The operations at this fire did not require any special pre-fire plan

Staging:

- All units reported to the scene and were utilized.

Support Functions:

- Rehab was established to the rear of the ICP in the parking lot and was handled by Medic 715.
- Canteen service was provided by Canteen 705.
- Breathing air replenishment was handled by Mobile Air Unit 716.
- Crews were relieved by fresh crews, or by crews leaving Rehab.
- Functions with outside agencies were properly coordinated (i.e. Police, Gas and Power Company,)

Safety:

- RIG was initially established on Side "A" of the building diagonally across the parking area from the Townhouse.
- Very quickly the RIG Supervisor made the recommendation to split the RIG, moving 2 of the units to the rear of the row of townhomes. Command agreed that this would allow for a decreased response time should anything occur on Side "C" of the structure.
- Initially C717D was assigned as the ISSO until the arrival of Safety700
- No MCFRS personnel suffered injury.
- No MCFRS equipment was damaged

Accountability:

- No accountability board was used. Crews were accounted for by using the ICS tactical worksheet and the Daily Line-Ups carried in the Battalion Chief 705 vehicle.
- Montgomery conducted incident time reminders/warnings.
- PAR – conducted at the 20 minute mark, then at 15 minute intervals.

Things that went well:

- Water supply instructions clear and well done
- Crews worked very well together coordinating efforts
- Initial Apparatus Placement
- Ladder Placement was excellent
- Proper Strategy (Aggressive Offensive Attack)
- Tactics implemented, supported strategy.
- Crew integrity maintained.
- Rapid establishment of a command team (BC703 joined BC705 in the command vehicle) allowed command to maintain accountability and rapidly gain control of a complex incident.

Area's for improvement:

- Initial on-scene report failed to identify 2 out crew
- Failure to adequately insure and expand upon the water supply of the 1st due Engine Company. Engine 734's supply line was never picked up. 2nd due Engine Company arrived on the scene from a bad direction and was initially blocked from the supply line. The officer dismounted and asked his driver to reposition to pick up the hydrant but did not insure completion of the task. The driver at least minimally attempted to relocate but quickly came to the conclusion that he could not accomplish the task, however, failed to notify anyone that his task could not be completed.
- Confusion over exposure designations and the direction of later fire spread delayed the allocation of proper resources into the proper homes to prevent any additional fire damage.
- Circle checks are an important component to an Officer's decision process. A circle check also assists all other responding units by providing them with more information about the event. While the circle check was completed by the first due tower the information was not transmitted via radio, so all could benefit.

UNITS ON INCIDENT

1st Alarm

PE734 – Dispatched 1st to report of exterior fire.
PE735, PE708, PE729, PE722
AT734, PAT708
PS729
A708
BC705, BC703

RID

T731, RS717, M708

Task Force Units

E753, PE728
AT735
CT708
AR733

2nd Alarm

E726, E740, PE717, PE703
AT723, T725
M735
CP727

Additional Command and Support Personnel

C717D, C717E, CS700, EX700, FM54, FM63, VBC703, K708D

Conclusion:

A rapidly escalating townhouse fire such as this demonstrates how important the rapid coordination and control of operational and arriving units is on the ultimate outcome of an incident. It highlights the quality and effectiveness of MCFRS's current command platform and strategy. As well as how the rapid development and expansion of the command team aided in the effective coordination, control, and supervision of multiple companies. Those companies engaged in an aggressive fire attack during a rapidly escalating incident and were able to rapidly decrease the fire strengthening and spread. This enabled them bringing the fire under control quickly and safely, while limiting the expansion and damage to the surrounding homes.

While not perfect, the crews did an outstanding job mitigating this incident and fortunately for us the errors made and learned from did not affect the ultimate outcome. They will be valuable teaching points for the companies involved and ultimately lead to improved response in the future.